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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,105	09/18/2003	William L. MacIsaac	MACW121578	9343

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EXAMINER

TO, TOAN C

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 08/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/667,105	MACISAAC, WILLIAM L.	
	Examiner	Art Unit	
	Toan C. To	3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 89-187 is/are pending in the application.
- 4a) Of the above claim(s) 91-104, 110-115 and 119-187 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 89, 90, 105, 116 and 117 is/are rejected.
- 7) ☒ Claim(s) 106-109 and 118 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>08/09/04; 01/25/06</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election of Species 16, represented by figure 34, claims 89, 90, 105-109, 111, and 113-118 in the reply filed on May 24, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 91-104, 110, 112, and 119-187 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on May 24, 2006.
3. Claim 111 is further withdrawn from further consideration by the examiner as being drawn to a nonelected species. In this case, the elected species, represented by figure 34 does not show "a steering system" as recited in claim 111.
4. Claims 113-115 are further withdrawn from further consideration by the examiner as being drawn to a nonelected species. In this case, claims 113-115 depend on the non-elected claim 112 which have been withdrawn from further consideration as indicated above; therefore, claims 113-115 are withdrawn as well.

### ***Claim Objections***

5. Claim 89 is objected to because of the following informalities: "a tie structure" in line 6 should be --said tie structure--. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –  
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 89, 90, 105, and 116-117 rejected under 35 U.S.C. 102(b) as being anticipated by Van Der Knaap et al (U.S. 5,716,067).

Van Der Knaap discloses a vehicle suspension system for a vehicle having a body, the body having a pitch center and a roll center (17), the vehicle having at least one ground engaging vehicle support assembly (1), the vehicle having a reaction center (11), comprising: (a) at least one tie structure (3, 3', 5, 12, 13, 16) interposed between the vehicle support assembly (1) and the body (4) of the vehicle to serve as the path for the forces imposed on the vehicle that travel between the pitch or roll center and the support assembly, wherein the tie structure selected from the group consisting of: (i)-(v) as claimed; (b) a first interconnecting system (interconnecting relationship between the vehicle body 4, the wheel 1 and the linkage triangle 2) for interconnecting two or more of the: vehicle support assembly, the tie structure (3, 3', 5), and the body (4) so as to allow one of the pitch center, roll center and pitch and roll center, such center being located at an elevation above the reaction center (11) of the vehicle, to move on the direction of the forces that are imposed on the vehicle, thereby to preclude the applicable roll center, pitch center, or pitch and roll center from serving as the reaction

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center of the vehicle; (c) a second interconnecting system (interconnecting relationship between the push rod 14, horizontal rod 15, the spring 18 and the vehicle body) for interconnecting the tie structure (12, 13, 16) and the body about the pitch center or the roll center, both centers being located at elevations above the reaction center of the vehicle, whereby upon forces being imposed on the vehicle during operation of the vehicle, the body rotates around the center(s) of rotation relative to the tie structure, in the direction opposite to the direction of the forces acting on the vehicle in pitch or roll; and (d) a load control system (load control system as shown in figure 3) interposed and interconnecting the body (4), the vehicle support assembly (1) and/or the tie structure (3, 3', 5, 12, 13, 16), wherein the load control system generating a resistance to the movement of the pitch or roll center (17) which is greater than the resistance generated by the load control system to the movement of the center of gravity of the vehicle due to forces applied to the vehicle during operation of the vehicle.

As to claim 90, Van Der Knaap discloses a vehicle suspension system wherein the load control system having a dampening system (7) to dampen the movement of the pitch center, the roll center, the center of gravity, and the support assembly relative to the ground.

As to claim 105, Van Der Knaap discloses a vehicle suspension system, wherein the first interconnection system (interconnecting relationship between the vehicle body 4, the wheel 1 and the linkage triangle 2) interconnecting the tie structure (12, 13, 16) to the vehicle support assemblies (1) and also interconnecting the body (4) to the vehicle support assemblies (1), wherein the first interconnection system is movable in the

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upright direction to enable the body (4) to move in at least one of the pitch and roll directions relative to the tie structure in the direction opposite to the direction of forces applied to the vehicle during cornering and braking.

As to claim 116-117, Van Der Knaap discloses a vehicle suspension system, wherein the second interconnection system comprising a plurality of pivot arm structures (2) interconnected between the body (4) and the tie structure (3, 3', 5), the pivot arm structures coupled to the tie structure (3, 3', 5) about a singular axis and the pivot arm structures coupled to the body about a single pivot axis, the pivot arm structures orientated relative to the body to be in alignment with a center of rotation of the body; wherein the pivot arm structures (2) coupled to the body and/or tie structure about two axes, the pitch axis and the roll axis of the body.

#### ***Allowable Subject Matter***

8. Claims 106-109, and 118 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Toan C. To whose telephone number is (571) 272-6677. The examiner can normally be reached on Mon-Fri (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TTO  
August 2, 2006